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WE CLAIM:

1. Apparatus for bone densitometry comprising

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b ^{*a*} means for acquiring and storing information relating to the density of bone tissue within a body area,

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means for storing information relating to a plurality of bone disorder treatment regimes, and

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means for defining a body area in relation to which to select information from stored bone density information, or from which to acquire said bone density information, for processing to derive a bone densitometry read out relating to the defined body area,

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wherein said body area defining means is responsive to an operator's choice of a treatment regime out of the treatment regimes for which information is stored.

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2. Apparatus as claimed in Claim 1, wherein said treatment regimes relate to different medicaments.

A 3.

Apparatus as claimed in Claim 1 ~~or Claim 2~~, wherein said information relating to said treatment regimes identifies a respective body area to be defined in said body area defining means in relation to each treatment regime for which information is stored.

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Sub B 4. Apparatus for X-ray bone densitometry of the forearm in which bone densitometry read out is obtained from data relating to an area of bone defined in the radius and/or the ulna ^{*B*} so as to have a distal boundary lying distal of the turning point between the radius and ulna but proximal of the

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dense cortical region of the end plate of the bone, with side edges lying within the bone inside the densely cortical margins of the bone, and extending in the proximal direction beyond the said turning point but without penetrating into regions in which there is more cortical than trabecular bone.

6. Apparatus as claimed in Claim 4, wherein the length of said area in the distal proximal direction from 0.9 to 1.1 times the maximum width of the area for the radius or is from 1.2 to 1.5 times the maximum width for the ulna.

8. Apparatus as claimed in Claim 5, wherein said trapezoid is defined by locating the turning point between the radius and ulna, constructing a first line from said turning point parallel to the axis of the arm, defining a second line 32mm proximal from said turning point and at right angles to said first line, defining a point on said second line such that the distance between the intercept of the mid line of the radius and said second line and the intercept of the inner margin of the radius and said second line is equal to the distance from said point to the intercept between the inner margin of the radius and said second line, constructing a reference line from said turning point to said defined point, defining a trapezoid having its longer parallel side on the line between said turning point and the point on the outer edge of the radius or ulna and at the same distal-proximal level as the turning point such that the distance between said point on the outer edge of the radius or ulna and the adjacent vertex of the trapezoid is equal to the distance between the vertex at

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the other end of said longer parallel sides and the turning point, moving said trapezoid to a position 1.2mm of the end plate of the radius or ulna respectively and rotating said trapezoid about the inner vertex involving the longer parallel side thereof until the shorter parallel side thereof is bisected by the mid line of the radius or ulna respectively.

A 9. Apparatus as claimed in Claim 4 ~~or Claim 8~~ wherein the size of the trapezoidal region of interest is 14 x 14.6 x 6 x 14.6mm for the radius or 8 x 11.4 x 2.4 x 11.8 for the ulna.

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